SAH
#4
9.26.01

IN THE UNITED STATES PATENT OFFICE

Serial No.: ~~Unassigned~~ 09/831763

Filed: ~~Herewith~~ 5-11-01

For: METHOD OF ELECTROLYTICALLY FORMING CONDUCTOR STRUCTURES FROM HIGHLY PURE COPPER WHEN PRODUCING INTEGRATED SYSTEMS

Inventor: Heinrich Meyer, Andreas Thies

Atty Doc. No.: 71-01

---

## INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

In the interest of full disclosure, the following items are herewith identified in Form PTO-1449 and a copy of the same is hereby provided, for the convenience of the U.S. Patent and Trademark Office.

This Information Disclosure Statement is being filed before the mailing date of the first official action.

### FOREIGN PATENT

**(AA) DE 195 45 231 A1** Heinrich Meyer, dated May 22, 1997. Relevance is that is was cited in the PCT Preliminary Examination Report as a category A reference for claims 1, 2 and 4-9 as the general state of the art.

### OTHER DOCUMENTS

**(AB)** J.W. Chang, P.C. Andricacos, B. Petek and L.T. Romankiw
ELECTRODEPOSITION OF HIGH M, CoFeCu ALLOYS FOR RECORDING HEADS
1991, Pages 275-287
IBM Research Division, T.J. Watson Research Center

(AC) L.T. Romankiw, pH CHANGES AT THE CATHODE DURING ELECTROLYSIS OF Ni, Fe, Cu and THEIR ALLOYS AND A SIMPLE TECHNIQUE FOR MEASURING pH CHANGES AT THE ELECTRODES
1987, Pages 301-325
IBM, T.J. Watson Research Center

(AD) P.C. Andricacos, C Uzoh, J.O. Dukovic, J. Horkans, H. Deligianni
IBM JOURNAL OF RESEARCH AND DEVELOPMENT VOLUME
September 1998, Pages 567-574

(AE) Linda Geppert
SOLID STATE
January 1998, Pages 23-28

(AF) A. RIESENKAMPF, et al.,
STUDIES ON THE PREPARATION AND PROPERTIES OF ELECTRODEPOSITED NICKEL-IRON AND NICKEL-COBALT MAGNETIC FILMS
1975, Pages 377-38. Relevance is electroplating of a perm-alloy (Ni/Fe-alloy) is described. For electroplating the alloy a plating bath is used containing iron at a content of 15 g/l $FeSO_47H_2$ which is essentially same as the iron concentration in the copper plating bath according to the invention. Electroplating from this relating bath would lead to a considerable iron content in the alloy.

Respectfully submitted,

John F. McNulty
Reg. No. 23,028
Attorney for Applicants
Paul & Paul
2900 Two Thousand Market St.
Philadelphia, PA 19103
(215) 568-4900